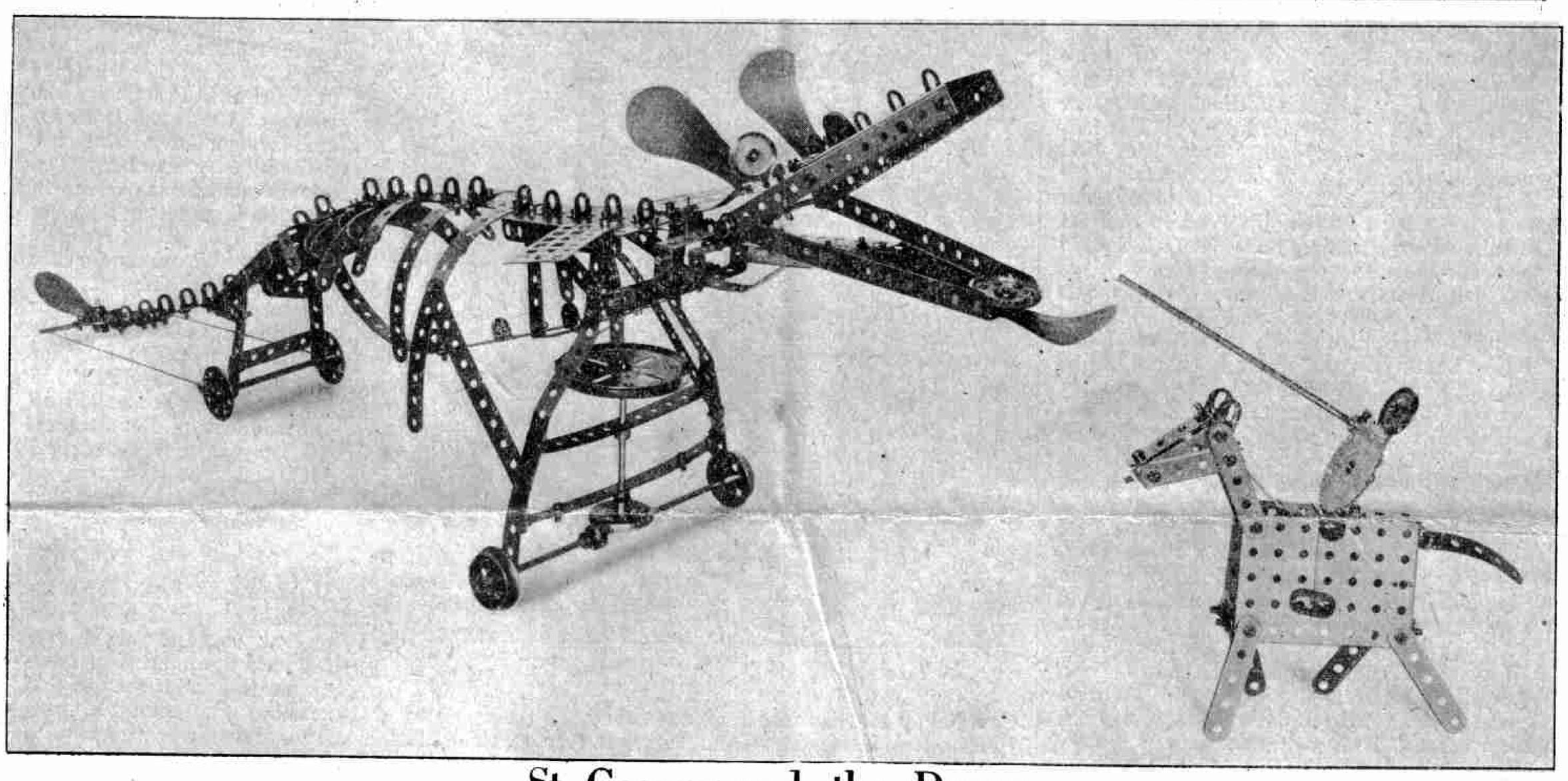
No. 19. JULY-AUGUST, 1921.

MECCANO MAGAZINE

TO HELP MECCANO BOYS TO HAVE MORE FUN THAN OTHER BOYS

PRICE 1d



St. George and the Dragon.

If Meccano boys could sit beside the judges when they are considering the entries in our £250 Competition, they would assuredly be amazed to see the extraordinary ingenuity displayed by competitors in applying Meccano parts to novel and unexpected uses. We illustrate here an example from the competition just closed. A boy who can create such a formidable monster must be blessed with a bright and vivid imagination. We hope that many of our readers will find this model sufficiently interesting to build for themselves. It requires little description. The jaws of the dragon work by means of a cord fastened to a 3½ in. strip which is attached to the 2½ in. × 2½ in. flat plate forming the head. The cord is passed through a hole in the 12½ in. strip, which forms the back-bone. It is attached at its other end to the periphery of a 3 in. pulley wheel, which is caused to rotate as the dragon moves along the ground. To make the tail wag, cords are fastened to each end of the pivotted 3½ in. strip which carries the bush wheel and propeller blade forming the tail, and attached at their other ends to angle brackets bolted to the back wheels. As the animal moves along the ground the tail wags in quite a realistic way.

Editorial.

£250 Competition Results.

I am pleased to be able to announce the full results of our last big contest in this issue. This has been a most successful event, and the work of adjudication has been long and difficult. Many fine models were sent in and I hope to illustrate some of the best in the *M.M.* a little later.

Meccano Boys busy during the Summer.

Although Meccano model building is mostly done during the Winter evenings, my heavy mail bag shews me that Meccano boys are by no means idle during the Summer. There is a vast amount of experimenting being done with the fine new parts which have recently been added, and keen workers are evolving new and ingenious types of models of which much will be heard later.

Meccano Friendships.

Nothing has given me so much pleasure recently as to observe the great number of strong and happy friendships which are daily being formed amongst Meccano boys. Meccano Club work, organised and encouraged by the Meccano Guild, and our flourishing Correspondence Club are in a large measure responsible for this, and many a lonely boy has reason to feel grateful to the hobby that has been the means of forming friendships for him amongst the cleanest and cleverest boys in the kingdom.

Which would you choose?

It has often been suggested that I should publish the lives of great inventors in the *Meccano Magazine*. Other suggestions have been for some account of different engineering appliances, such as Cranes, Bridges or Machines. Yet again, some readers would like to have as a regular feature, a short article on engineering achievements. I should like the readers of the *Meccano Magazine* to write and let me know which of these articles they would prefer—there is not room for them all—and we shall publish that series which is chosen by most of our readers. Address your letter or post-card to the Editor.

Increased Postage.

I would remind my numerous correspondents that the postage on post-cards has recently been increased to 1½d. A small matter, perhaps, but if you boys saw the huge numbers of post-cards I get by every mail upon which there is 1d. excess to pay, you would realise why I am mentioning the matter in this column.

A new £250 Competition.

A new big model building Competition will shortly be announced, and full particulars will be furnished in the next issue of the *M.M.*

The Editor

The Result of the Meccano Story Competition.

In our last Essay Competition it was suggested that we should publish in the *Meccano Magazine* short stories, in each of which the Meccano hobby would be the central idea. This suggestion interested us very much and we decided to offer a prize of a Hornby Clockwork Train Set for the best story received before 1st July. As a result, hundreds of entries have been sent in for the Competition and the judging of them has been a very long and difficult task.

The stories deal with all manner of subjects and include stories of engineering feats, autobiographies, adventures, detective stories, and fairy tales. Very interesting too, are those dealing with some of the wonderful dreams of Meccano boys. The results of the Competition fully confirm the belief we expressed, that Meccano boys can write intelligently and express their ideas clearly. That they possess vivid imaginations, in addition, is also clearly proved by the fact that the heroes of several of the stories used magic swords, made from Meccano strips, for despatching Giant Gloom; while more than one author took an imaginative trip to Mars by the aid of airships, built out of enlarged Meccano parts.

This Competition has been a great success and the results will be found below. I hope to print one or two of the winning stories in future numbers of the *M.M.* I should like to congratulate those who sent in the winning essays, while I would urge those who have not succeeded this time to endeavour to excel in our next Essay Competition, particulars of which will be announced in the *M.M.* in due course.

The best story was sent in by Master Eric Joyce, 8, Edinburgh Road, Walthamstow, E. 17. to whom a Hornby Clockwork Train Set has been despatched. Specially good stories were sent by Master W. I. Rogers, 66, High Street, Plymouth ("The Test") and Master L. I. Hunt, Magnus Grammar School, Newark ("Meccano to the Rescue") and to each of these entrants a special clockwork train set has been awarded.

The Winning Story.

Meccano and the Martians.

By Master E. Joyce.

It was a sunny morning in July, 2021. A few miles outside the city of Meccanoton, formerly called Liverpool, in a huge Meccano aerodrome, a gigantic machine "The Spanner" was being prepared for one of her periodical flights to Mars, laden with Meccano goods. As she reclined on the grassy sward in front of her huge hanger, people accustomed to ordinary machines, wondered at her somewhat curious shape. A testing machine was sounding every nut, screw and stay, and soon the dial of the tester indicated that all was well. The roomy machine was mainly occupied by Meccano goods, so that there were few passengers. They clambered aboard, followed by the attendants and pilot.

Directly the ponderous door was closed, the atmospheric machine automatically commenced its work of circulating currents of pure air through "The Spanner." The pilot, with his hand on a switch, paused on hearing the tinkling of a bell on a curious apparatus in his belt. He took the machine, a wireless telephone, from his waist and put the receiver to his ear.

"Hallo! is that the machine 'Spanner' at the Meccano aerodrome 157?" queried a voice.

"Yes," answered the pilot. "What do you want?"

"I'm speaking from the Meccano Works," continued the voice. "Are the 500,000 Meccano Magazines on board 'The Spanner'?"

Having given an affirmative reply, the pilot replaced the receiver in his belt, and by touching a switch, started the radium-worked engines of "The Spanner," which were capable of forcing the mighty machine through both air and space at a terrific velocity.

The earth seemed to drop like a stone, and the speedometer indicated that they were travelling at 40,000 miles an hour. After speeding through space for a month, a delicate instrument showed that they

(*Continued on page* 8.)

The Life Story of Meccano.

By Frank Hornby.

(*Continued.*)

I am sure that all you boys who have seen our newspaper and magazine advertisements so many times will be interested in learning something of the way in which they are prepared. We are determined that every boy in this country shall know what Meccano is,

A Meccano Advertisement in "The Daily Mail."

how happy it will make him, and what fine times he can have with it, and we spend very large sums in trying to reach him through our advertisements. It is very necessary, therefore, that the greatest care be exercised in order that the money may be spent judiciously, and at the beginning of each year we hold conferences at which our own advertising experts consult with an eminent firm of advertising agents in London. At these conferences discussions are held as to the best method of clearly and lucidly explaining the merits of Meccano to boys; how our advertisements shall be illustrated; which models shall be employed in the advertisements; which newspapers, Magazines, etc., shall be used; the dates on which our advertisements shall appear; the sizes of the spaces to be used, and the number of insertions in each publication. There is nothing left to chance on all these questions, and our long experience of advertising Meccano helps us to solve many of the problems which arise each year.

Big advertisements, like those appearing in the "Daily Mail" which cost £1,000 per page for each insertion, come in for special attention, and all the details in them, the wording, the illustrations, etc., are the subject of very anxious and careful deliberation. For advertisements of this kind many illustrations by first-rate artists are well considered before the final choice is made. After we have decided upon the general lines upon which the season's advertising campaign shall be run, the artists and copywriters set to work to submit first proofs of our advertise ments, and after further conferences these are finally passed, and instructions are given to the various publications for insertions at the proper dates.

This by no means completes the work of our Advertising Department in connection with press advertising. The Meccano Catalogue, "Meccanoland," other booklets and attractive literature of all kinds have to be prepared and made ready for despatching to the boys who write to us for particulars of the Meccano hobby. The writing and illustrating of all these calls for expert knowledge and much serious thought.

In addition to our advertising in this country we also advertise largely in the most important publications in South Africa, Australia, New Zealand, France, Belgium, Spain, Holland, Sweden, Denmark, Norway, the Argentine and Brazil. Practically the whole of the translations for our foreign advertising are made by our own staff. The advertisements are set up in type here, and the matrices made and despatched to the various publications for use during the Christmas buying season. In addition to this we translate most of our literature into about 10 different languages, the distribution in all cases being controlled by our Advertising Department.

Each year we spread further afield and more languages are added. From the beginning of September, when our big advertising commences, is a very busy time indeed in this Department. Each day hundreds of enquiries have to be replied to, and at a low estimate the number of communications addressed to this Department from boys who want full particulars of Meccano, and others who require information from the Department, is no less than 80,000 to 100,000.

(*To be continued.*)

Meccano Advertisement from a Danish Paper.

Suggestions by Meccano Boys.

This column is reserved for dealing with suggestions sent in by Meccano users for new parts, new models, and new ways of making Meccano model-building attractive. We are always glad to hear from any Meccano boy who has an idea which he considers will be useful to the Meccano system.

G. Brash, Walworth. In our next edition of the Electrical Manual we shall illustrate a simple electric motor made with Meccano parts. We doubt whether it would be practical to introduce mud-guards for chassis as there are so many different designs made by boys that it would be difficult to make one that would be interchangeable.

Alfred Beadles, Birmingham. A spring buffer would be a costly part to manufacture and we doubt whether it would be justified. We already have under consideration a cylinder for the purposes you name.

R. K. McLeod, Dulwich Common. We compliment you on being first with your Meccano models in the "Hobby Exhibition" of your school. We shall give your suggestion for a cylinder further consideration.

Geo. Leighton, Bishop, Borwich.—We endeavour to make the instructions in our Manual for building the models as simple as possible, but if any difficulty is experienced we are always glad to answer any questions sent to us. In suggesting the introduction of 4″, 6″ and 8″ wheels you do not say the type of wheels you mean.

H. Beadsmoore, Ashby-de-la-Zouch. We have under consideration the introduction of a cranked rod and connection for same. When this is ready it will be announced in the *M.M.* It is unnecessary for us to provide elastic bands for belt drives as these may be obtained at any rubber shop. We occasionally omit models from our Manual which are not sufficiently interesting or which it is intended to improve. We shall shortly issue a No. 3 Manual of new models which we are sure will interest you.

Edward B. Brake, Tansley. The wheel you mention is an internally toothed wheel. We already have an external curved rack and we shall give consideration to the internally toothed wheel. It would not be practical to have a diagonal hole in our present coupling such as you suggest.

A. Faulks, Bedworth. We have just included an eccentric in our list of parts. See announcement in this issue. This is a very fine new part.

B. Schubeler, London. A new coupling has just been added to our parts to connect a plain rod with a threaded rod.

J. S. Hare, Windermere. Our present rods may be connected by couplings to make 16″ and 20″ axle rods. We shall consider the introductions of 9½″ by 5½″ flanged plates and also the 1″ by ½″ double angle strip. An 18½″ strip may be made by overlapping and bolting together two large strips. We have already introduced a pawl which, in conjunction with a pinion, forms a ratchet. We do not quite understand your suggestion No. 5.

Robert Higgins, Lassodie. We have not yet considered the introduction of taps, dies, or hand drilling machines. No doubt you will be able to obtain these from your local tool shop.

A. B. Grosvenor, Norwich. Your suggestion for the introduction of obtuse angle strips is very practical and we shall consider the matter later.

F. G. C. Henwood, Dunedin, N.Z. It is possible to introduce eye bolts, but we should be glad to know the purpose for which you require them.

Arthur Heal, Farnborough. We doubt whether it would be advisable to introduce a coil spring on account of the difficulty of controlling it. We have considered the introduction of a ½″ sprocket wheel, but have found it impracticable on account of the size of the bush.

Gilbert Wilks, East Sheen. We think your suggestion for a 2½″ strip bent at one end a good one, and we shall give it further consideration.

G. S. Hollis, Cheam. We have already adopted a new type of coupling for our Hornby trains which overcomes your difficulty.

F. V. Mitchell, Chesterfield. We have recently introduced a 9½″ strip which we believe will meet your requirements.

Ronald Mansi, Battersea. We shall consider your suggestion for a curved girder.

G. Proto, Dundee. Your suggestion for a "Meccano parts and their uses column" is a good one, and we shall give it consideration. We also note your suggestion that we devote a column of the Magazine especially for replies to Guild Members' letters.

R. P. Jonas, Dulwich. We should like to know the purpose for which you require a threaded pin longer than the one we already list.

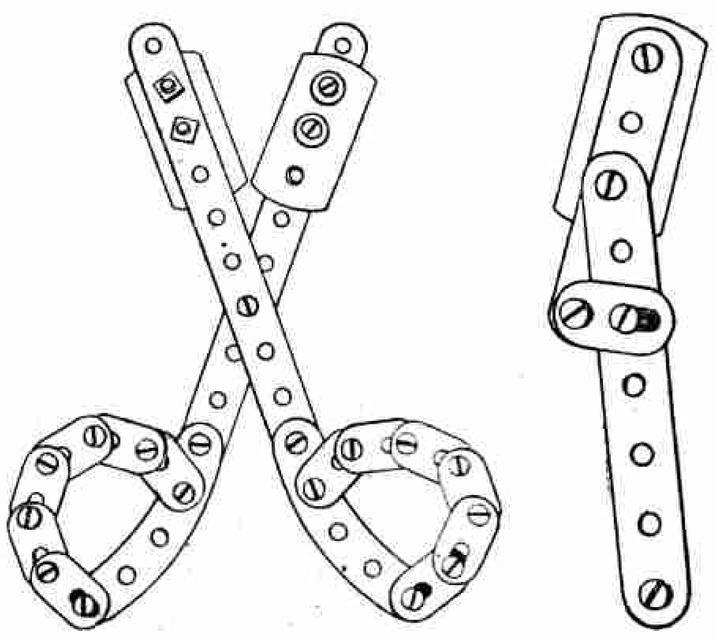
J. Long, Norwich. We doubt whether it would be advisable to issue various sizes and shapes of cardboard for the purposes you suggest on account of the unlimited shapes which would be required to cover the sides of models, etc.

E. Morrison, Motherwell. We think your wire stays bent round at each end a good suggestion and we shall give it consideration.

F. R. Falkner, Dundrum. Our regular rails for Hornby trains are not adapted to have a third rail connected to them as it would require a special chair and proper insulation, but we shall arrange for this later.

H. King, Alresford. Our present rack strip may be increased in length by butting together more than one.

William J. Rogers, Plymouth. We feel sure your suggestions for using old safety razor blades to make a pair of scissors, photographer's trimming knife, and for use with our model cutting machine No. 144 will be interesting to our readers, and we have thought well to illustrate them.



B. Cordiner, Dingwall. It would be necessary to provide current to run the dynamo, and the same current would run your motor so that we see no advantage in considering the introduction of a dynamo.

G. W. Adams, Westward Ho. We may introduce reversed brackets with three and five holes later. We already have double angle strips with these number of holes, would these not suit your purpose? We are sorry you have received some defective wheels. If you will return them to us we will replace them with good ones. We endeavour to avoid defects by testing each part before it leaves our factory. We shall go into the matter of reducing the projection of the pummel on the bush wheel, and see if this is practicable. We have in mind the introduction of longer threaded rods than 5 inches. It would add very considerably to the cost if we were to drill and thread each pummel right through, and we doubt whether it would be expedient seeing that only a few would be required where a firmer grip was needed. We shall consider the introduction of right angle plates to take the place of diagonal tie strips.

E. Armitage, Garston. Your suggestion for an alteration to our large sprocket wheel to make it suitable for building up a hexagon is on good lines, but we had already decided to pierce this wheel with eight holes, enabling strips to be attached at right angles, and providing other useful advantages. We will keep your own idea in mind.

Wm. Pringle, West Stanley. The sample of sleeve you sent us for butt joining two angle girders or strips might be useful in some cases, but we think its drawback would be the absence of a secure fastening.

T. Kendall, Southampton. We are at a loss to know why you suggest fastening three pinions together like the cone pulley. Would they not serve your purpose disconnected on the same rod? We hope later to introduce steam trains. This is a big proposition and will require much preparation.

M. H. O. Lewis, Helvedon. Your suggestion for a petrol engine to take the place of the clockwork motor and electric motor is a good one. We doubt whether it would be less costly than the Meccano electric motor with an accumulator, but we will consider the suggestion.

Vernon Dennis, Nottingham. We already have under consideration the introduction of a cranked rod with suitable connection, and when this is ready it will be announced in the *Meccano Magazine*.

W. G. Symons, Streatham. Regarding your suggestion of a curved plate, eye piece for braced girder, etc., you do not indicate how you consider they would be useful to the Meccano system. Before we can adopt new parts we must be sure that they will serve a definite and useful purpose.

S. W. Gough, Smethwick. The threaded rod you suggest would not be in accordance with our standard thread, and we are at a loss to know how you would adapt this to other standard Meccano parts.

S. Harry Frank, Petersfield. We are considering the introduction of a large flanged wheel standardised to run with our regular flanged wheel.

Reginald V. Pike, Mortlake. Your suggestion for using old safety razor blades snapped off at any angle to the edge, for use as cutters in lathes, or planing machines, is quite ingenious and no doubt many Meccano users will avail themselves of it.

The Meccano Guild

Member's Badge

Leader's Badge

A Fellowship of Meccano Boys

The objects of the Meccano Guild are

(a) To make every boy's life brighter and happier.

(b) To foster clean-mindedness, truthfulness, ambition, and initiative in boys.

(c) To encourage boys in the pursuit of their studies and hobbies, and especially in the development of their knowledge of mechanical and engineering principles.

The Meccano Guild has been formed to bring Meccano boys more closely together, and to make them feel that they are all members of a great brotherhood of boys, trying to help each other and themselves to get the very best out of life.

Every Meccano boy can join the Guild as an individual member, and so share in the privileges of membership. As soon as possible he should attach himself to a local Meccano Club, or if there is not one already in existence, he should take steps to form one with the assistance of his Meccano boy friends.

The Secretary of the Guild is always very glad to help with the formation of new Meccano Clubs, and to provide literature which will give all the necessary information.

Every new Meccano boy should immediately get to know all about the Guild in order that he may get the full pleasure from Meccano model-building, and the companionship and friendship of hundreds of thousands other boys who are glad to welcome him as a friend.

Forms of application and all other information will be furnished by The Secretary, Meccano Guild Headquarters, Old Swan, Liverpool. Each member on joining is furnished with the official member's badge, and a beautiful Certificate of membership ready for framing.

Guild Notes.

By the SECRETARY.

The Meccano Guild is forging ahead and every day I receive letters from enthusiastic Club Leaders and Secretaries, who express their appreciation of the movement in no uncertain terms. Although the original intention was to hold only two sessions each year (Session 1, October—December, Session 2, January—March) so great is the members' enthusiasm that several Clubs are holding additional sessions through the Spring and Summer months. This is quite a sound idea, and I was pleased to note that excursions to works and places of interest, as well as cricket matches and sports, are prominent in the programmes of several Clubs. Meccano boys are true sportsmen, and can play Cricket and Footer with the best. Clubs in the same districts are able to arrange matches with each other and in these many ways does the Guild help Meccano boys to have enjoyable times.

I would very strongly urge upon Leaders and Secretaries the desirability of continuing their club activities through the Summer. By doing this they will keep their members together in happy companionship, help them to form strong and valuable friendships amongst themselves, and will also ensure a successful and enthusiastic opening of their next Winter's session. I have already indicated the lines on which a number of clubs are arranging their Summer programmes, and I would commend to Leaders and Secretaries a careful perusal of the Club notes in this issue for hints and guidance on this very important matter.

Every day brings new members to our Guild and in this the Recruiting Campaign, which ended 31st March, was largely successful. I would remind members that the new Campaign has well started and by the large amount of work already done, I feel confident that on the closing date (31st December, 1921) the results will even surpass those of the last Campaign. Each member who secures three new recruits will receive a handsome Medallion. Recruiting Forms may be had on application, and each member should write his own name and address on the back of the form used.

I have to thank several Clubs for sending me further copies of their Magazines. The quality of these little productions is improving considerably. I have been wondering which of the Clubs will be the first to actually print their Magazine. At present, of course, the high cost of printing prevents this being done. For the same reason we are not able to increase the *M.M.* in size, although I am constantly receiving suggestions that the number of its pages should be doubled, nor are we able to publish more often. We certainly have the enthusiasm necessary amongst the members, and we could fill every issue with Club Notes alone.

Our Correspondence Club continues to be much appreciated, and has been the means of commencing many close friendships. Any member who is interested in corresponding with other Meccano boys should write to me for full particulars of the Guild Correspondence Club.

There have been a number of requests for a membership card for distribution among Club members, which would contain a syllabus and the Club rules. Several Leaders and Secretaries have kindly forwarded me ideas, and I shall be pleased to have further views, as I propose issuing the cards in good time for the 1921-2 Winter Session. The chief difficulty is that all Clubs have a different programme, and it will not be possible to separately print each individual programme. What is required is some form of membership card applicable to the whole of the Clubs, and yet adaptable to the requirements of individual Clubs.

I find that many of our Clubs and members are still receiving letters from native boys in Africa. These generally come from the Gold Coast, and sooner or later ask for presents to be sent to them. I have previously advised all Meccano boys to ignore these letters, and I now mention the matter again.

Club Notes.

BRISLINGTON M.C.—Have obtained the use of a room in the New Parish Hall, meet each week and have a good attendance. Held two Competitions during the season and awarded money prizes. Gramophone and Lantern evenings much enjoyed. Closed session with a tea, paid for out of balance of Club funds. *Secretary:* Master W. R. Knight, 13, Belle Vue Terrace, Brislington, Bristol.

CLAYGATE M.C.—During the past session lessons in carpentering were given. Lecture: "How to Use Tools" and instruction on the different kinds of wood and their uses. Members now number 44. Under the guidance of Mr. H. Hudson a model of a Floating Dock was constructed, and this won First Prize in the Inter-Club Competition. (Photographs of this model may be obtained from the *Club Leader*, Mr. J. W. Haynes, Fontmell, Covers Road, Claygate, Surrey, post free 1s.) Entertainment arranged by Leader, performance by Club members of "Dick Whittington" realised £19. 7s. for Club funds. Sports were arranged for June with a fancy costume Cricket Match, exhibition of models and many other attractions. The Claygate Brass Band attended and there was a full programme of events followed by a tea. Sir Francis and Lady Barker very kindly presented the prizes. It is hoped that at least 100 members will be enrolled by the commencement of next session. *Secretary:* Mr. Brittnal, Vale Road, Claygate, Surrey.

CIRENCESTER M.C.—Doing good work. Visits to Electricity Works and Railway Works were of great interest. Several excellent papers read by members during the session. Arranging to hold a model building competition. *Secretary:* Master N. Gobey, "Clovelly," Victoria Road, Cirencester.

ASCENSION (London E. 16) M.C.—Balance sheet shows balance in hand of £1. 7s. 0d. Lectures on "Trucking" by Master H. Maggs, and "Railways" by Master M. Prater. The Club has been carried on under difficulties, and much is due to Mr. J. McDonald, the Vice-President, who has done good work in filling the position of Club Leader. Average attendance of 20. *Secretary:* Master M. Prater, 96, Alnwick Road, Custom House, London, E. 16.

ALL SOULS (Liverpool) M.C.—Membership is improving, and model building is being continued through the Summer months, along with discussions and games. Picnic arranged for August Bank holiday, and also outdoor sports. Club funds augmented by sale of periodicals and magazines among members. I very much regret to learn of the death of Rev. Father Southworth, through a motor-cycling accident. To him the Club owed the loan of their Club room. *Secretary:* Master T. Roberts, 170, Dryden Street, Liverpool.

CITY OF NORWICH SCHOOL (Norwich) M.C.—Several large models built during the session, including an overhead rope railway, water-chute, and electric motor lorry. Three enjoyable papers read: "Photography" by Master Kingaby, "Stamp Collecting" by Master J. Long, and "British Butterflies & Moths" by Master Kingaby. Exhibition of models, the best model being subsequently shown in the School Art Room on Speech Day. Meccanograph was very popular and designs much admired. The outdoor programme arranged for the summer months includes several country cycle rides. Balance sheet shows small balance in hand. *Secretary:* Master J. Long, 19, Newmarket Street, Norwich.

BUTT LANE (Talke-on-Trent) M.C.—Exhibition proved most successful; models showing a very high standard throughout. Nine new members for next session. *Secretary:* Master G. Brookes, Congleton Road, Talke, Stoke-on-Trent.

BROMSGROVE (Worcester) M.C.—New Club. Forming a Cricket Team during the summer. *Leader:* Mr. J. S. Cooke, Market Place, Post Office, Bromsgrove. *Secretary:* Master J. Gibbs, Rock Hill, Bromsgrove.

AIRDRIE N.B. Y.M.C.A. M.C.—New Club. Enthusiastic start shows great promise. Meets at Y.M.C.A. Hall, East High Street. *Leader:* Mr. Robt. Bell, "Cairnhope," Cairnhill Road, Airdrie.

GRIFFITHSTOWN (Mon.) M.C.—Very successful session, Model building, Story telling, Lectures, Painting, Drawing and Gymnastics. Session closed with Exhibitions of Models. Concert by members included musical items and Gymnastic Display.

Over 100 attended. For Summer months have arranged rambles and outdoor events, the first of which was a very successful paper chase. Have already arranged for several Lecturers for next session, including the chief engineer and draughtsman from a large steel works, and an official of a School of Mining. *Secretary:* Mr. H. Francis, 2, Park Street, Griffithstown.

JUNIOR ENGINEERS (Longsight) M.C.—Going strong. Now 35 members. *Club Leader* Mr. J. Yeats writes: "We are sailing with the gale." Mr. Norman Meredith, engineer, of Stretford, judged entries of recent Competition. First prize was awarded to Master A. Whitwam (1st round), Master S. Whittaker (2nd round), and Masters A. Walker and O. S. Levings took the Ridgway Prize. Some very fine models built. Had interesting cycle runs, visiting Barton (to view Bridge), Warrington, and deserted village of Havana, near Congleton. Planning many enjoyable runs for future. *Secretary:* Master Tremlow Booth, 96, Birch Lane, Longsight, Manchester.

HILDENBOROUGH M.C.—Closed successful session with an Exhibition. Picnics being arranged for Summer months. Accounts show a balance of 15s. in hand. *Secretary:* Master W. Bassett, Laburnham Cottage, Hildenborough, Kent.

KING STREET (Luton) M.C.—Many interesting meetings held. Model-building, competitions and discussions. Microscopical evenings also arranged. Lectures by Master Squires on "Automobiles." Session closed with an enjoyable Social at which prizes were awarded. The accounts show a small balance in hand. *Secretary:* Master W. Humby, Luton.

NEW MALDEN M.C.—Session has been most successful both financially and socially. 10 new members, 21 meetings, Model-building and Lectures. Two Exhibitions and Concerts added greatly to the Club funds. Club Library contains a variety of books on engineering. Visit to engineering works is being arranged. Balance of over £5 in hand. The Club Leader, Mr. V. Hammond writes:—"I have received a great deal of praise from the parents of members, the managers of the School and other interested persons. I wish you would oblige me by allowing me to hand to the boys their full share of praise. They have worked splendidly during the session, and there has been splendid co-operation between members, combined brains solving many difficulties. I am specially indebted to Master S. B. Evans, Secretary of the Club for the amount of time and labour he has put into the Club work to make it a success, and also to Master Dudley Forshaw for his untiring energy and valuable help with intricate models."

The Club is to be congratulated on its splendid enthusiasm, and on the excellent work done by its members. The session closed with an exhibition for which an excellent model of a Fair, on the Earl's Court lines, was constructed. Included in the models were Switchback, Eiffel Tower, Big Wheel, Swings, Flip Flap, Flying Boats, Roundabout, and several interesting side shows. The whole was encircled by a railway with Hornby Train, and crossed by a bridge. Even artificial lighting was not forgotten, and electric standards were placed on the fair ground. This model has since been awarded the first prize in the inter-club competition.

KENYON HALL COLLEGE M.C.—Club going well, and had a very successful session. Lectures and Model-making, visits of other Clubs. Programme of summer session includes several Lectures on Mechanics" by Dr. J. Mastin, D.Sc., etc. *Secretary:* Master J. W. Mayhew, Kenyon Hall College, Kenyon, Manchester.

LISCARD HIGH SCHOOL M.C.—New Club. Successfully started. *Leader:* Mr. H. S. Casey, 3, Brisbane Avenue, New Brighton. Summer programme includes visits to Factories, Workshops, Docks, Ships and Telephone Exchanges, as well as picnics. Have had first outing, visiting the Electric Power Station at Wallasey. Lectures have been given on "Electricity" by Master Holmes, "The Locomotive" by Master Boyes, and on "First Aid" by Mr. Brunsden, who kindly visited the Club for the purpose. *Secretary:* Master B. Warburton, 11, Brisbane Avenue, New Brighton.

WATERFOOT M.C.—Session opened with a successful exhibition, proceeds given to the Childrens' Home. Lectures on "Electricity" by the Club Leader, Mr. Teasdale; on "Picture Framing" by the Assistant Leader, Mr. N. Jackson; and on "Various Kinds of Joints" by Master Maudsley. Model-building nights alternated with hobby nights—an excellent idea. The session closed with a Social. *Secretary:* Master J. W. Mawdsley, 334a, Edgeside Lane, Waterfoot.

WESTERTON M.C.—Session opened with a study of model Railways, each member building a different model in connection with railways. Special evenings were devoted to a study of aeroplanes, ships, motors and armoured cars and cranes. *Secretary:* Master J. Ireland, Westerton, by Drum Chapel, Glasgow.

NORWICH ENTERPRIZE M.C.—Club making favourable progress. Considerable time devoted building models in which the subject is announced for the following week's meeting, and each member builds a model according to the capacity of his set. These models then form part of a large model and are built up together at the ensuing meeting. The best of these combination models was a model Village, and this was a splendid model including a Railway Station with Hornby Train, splendid bridge, signal box, operating bells, signals and gates, electric telegraph, shops and houses and many other interesting models. It was visited by a large number of parents and friends, who were entertained by the Guild members working the models, following which an impromptu concert was held. The Club Leader announced the boys are very keen and during the summer months outdoor games and cross country runs are being arranged. The club won the second prize in the inter-club competition, and are to be congratulated in their effort. *Secretary:* Pastor A. B. Grosvenor, 118, Vincent Road, Norwich.

LEAMINGTON M.C.—Very successful Social evening. Large number of visitors. Lt.-Gen. Sir John Keir distributed prizes. Dr. C. Crowther gave special prize to Master Saltmarsh for essay. Visitors then inspected models, which included Travelling Gantry, Motor Chassis, Electric Loco., Windmill, and Pit Head Gear. The following is an extract from the local paper:—

"The boys gave a display of their decided talent on the social side; they arranged an impromptu concert, including part songs, recitations, vocal and instrumental music. The Rev. J. A. Murray spoke in the highest terms of the Club's usefulness in encouraging the study of engineering and general science, and of the zeal of the Leader (Mr. Bull) and the enthusiasm of the boys. The session has been a great success, and Leamington can boast of having one of the finest Meccano Clubs in Great Britain. The Club appeals to the intellectual side of a boy's recreation, and most of its members have an ambition to make some name in the engineering world later on. During the summer months visits are made to engineering works, and on the social side the Club organise picnics, also motor and cycle excursions." *Secretary:* Master G. Hare, 36, Willes Road, Leamington.

NONINGTON (Dover) M.C.—Held an enjoyable session. Cricket and games during summer. Suggested Club Motto "Think and Act." The accounts show a balance of 19s. in hand. *Secretary:* Master K. Leppard, Nonington.

CIRENCESTER GRAMMAR SCHOOL M.C.—Very successful session. Excellent papers read including "Shipbuilding," by Master Robertson; "Marine Salvage," Master Legg; "Sailing Craft," Master Gobey; "Transport Ships," Master Inward; "Warships," Master Tolley, and "Submarines," Master Richards. Visits paid to the Cirencester Electricity Works and Midland and South-Western Railway Works. The Session was closed with an impromptu concert, which was very amusing. No Summer session being held, the time being devoted to Cricket and other outdoor pursuits. *Secretary:* Master H. W. Inglis, 3, Colin Villas, The Avenue, Cirencester.

Guild Members and the £250 Prize Competition

The list of prize-winners in our most successful model-building Competition is printed elsewhere in this issue. Meccano Guild members will be specially interested in the awards, for in addition to the valuable cash prizes and the numerous other prizes awarded, the Guild offered three special prizes of £5 in cash to the member of the Guild who gained the best prize in his section. This presented a splendid opportunity to members of the Guild and was also of great interest to our Clubs. That the Guild members were fully alive to the advantages of this special offer was shown by the very great number of models entered by members.

Elsewhere Mr. Hornby has paid a tribute to the ingenuity displayed in the design of new movements and models, and I was pleased to see that our Guild members played a prominent part in submitting new designs. This is not at all unexpected, of course, for our ranks include some of the cleverest and most enthusiastic Meccano boys.

The three cash prizes of £5 are awarded to the following members each of whom gained the best prize in his section.

Section A.—J. Dorling, Delamere Street, Boniface Cliff, Shanklin. Model lighthouse.

Section B.—S. B. Evans, 22, Howard Road, New Malden. Quayside warehouse.

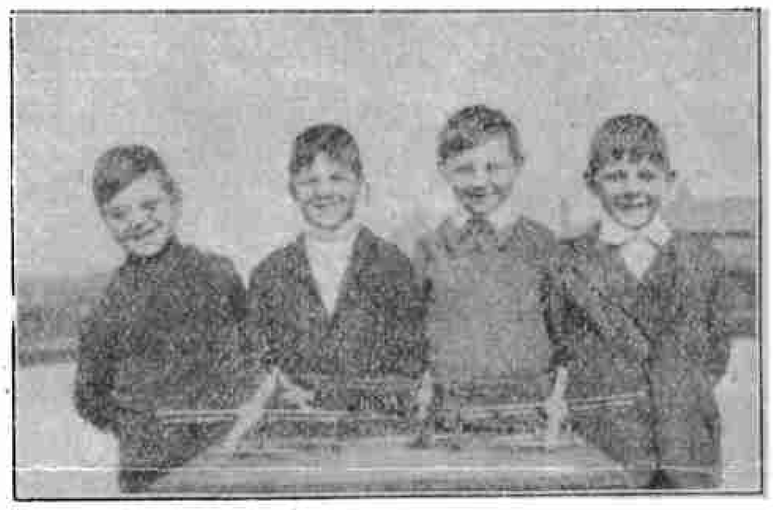
Section C.—E. C. Herbert, 16, Harradon Road, Aintree. Ship's gantry crane.

Special prizes for Guild members will again be offered in our 1921-22 Competition, particulars of which will appear in the *M.M.* later in the year. All Meccano boys should join the Guild at once, not only that they may obtain the full pleasure from building Meccano models, but also that they may have the world-wide friendship of hundreds of thousands of other Meccano boys, who are already members of the Guild. By becoming members of the Guild, Meccano boys may join the local Meccano Club. Clubs will shortly be commencing their next sessions, and new members will be warmly welcomed.

The Inter-Club Competition.

In the No. 17 Meccano Magazine it was announced that the closing date for the Inter-Club Model Building Competition was the 15th of May. The result has been very gratifying and a large number of models have been submitted. The First Prize of £5 in cash has been awarded to the New Malden Meccano Club for an exceptionally fine model of a "Fair Ground," which is referred to elsewhere in these pages. The Second Prize of £3 in cash has been awarded to the Norwich Enterprize Meccano Club, also for an excellent model and, curiously enough, the subject chosen in this case was also a "Fair Ground." The entries for this Competition were of a very high standard of workmanship, and in the Prize-winning models no details were omitted. A model I should like to specially mention is that submitted by the Ratcliffe College Meccano Club of a "Landing Stage."

Joy in a County School.



To the Editor,

Meccano Magazine.

Dear Sir,

This is a large school of 1,200 children. We recently held a Meccano Competition of original models for the boys of 8–9 years of age, and I am sending you snapshots of the best presented.

The boys are very keen on Meccano. Through the interest of their teacher thirty-eight boys out of fifty in one class have outfits, and as their birthdays come, that number is being increased. Other classes are also keenly enthusiastic, and we have held inter-class Competitions.

Yours sincerely,
The Head Teacher.

The above letter is typical of very many which we receive from School teachers. We have pleasure in reproducing one of the snapshots referred to. A more pleasing picture of juvenile happiness we have never seen.

How to get the Meccano Magazine regularly.

The Meccano Magazine is now sold by most of the regular Meccano dealers, but in order to prevent disappointment you should place an order with your dealer for a copy of each issue to be reserved for you. The price of each issue is 1d. If you experience difficulty we will mail you a copy regularly on receipt of 6d. for the next six issues, or 1/- for the next twelve.

RESULT OF THE £250 MECCANO PRIZE COMPETITION

FULL LIST OF AWARDS

This has been the most successful model building competition we have ever run, both as regards the number of entries and the excellence of the models submitted. It has been a real pleasure to me to note the ingenuity displayed by most of the competitors in designing new movements and models, and I have again this year increased the number and value of the prizes in order that those who have shown most inventiveness and resource may receive proper recognition.

The dividing up of our big Prize Competition into Sections according to age has proved most successful, and the same course will be followed in the 1921-22 Competition. Full particulars of the last named event will be announced in the next issue of the Meccano Magazine.

I congratulate the winning competitors on their successes, and to the unsuccessful ones I would say that many of them missed gaining prizes by only a very few points, and I feel quite sure that I shall see their names in the lists of awards in future competitions.

Frank Hornby

THE PRIZE WINNERS

Section "C" (Competitors over 14 years of age on May 1st, 1921)

E. C. Herbert, 16, Harradon Road, Aintree. Ship's Gantry Crane .. .. — First Prize - £20

W. R. Parkes, 2, Gawber Road, Barnsley. Mechanical Harmonograph .. .. } — Second Prize (Divided) £15
R. McKenzie, 1812, Newkirk Avenue, Brooklyn, N.Y. Coal Ship Unloader .. }

J. Yoxall, 76, Carleton Street, Nelson. Beaming Frame .. .. } — Third Prize „ £10
L. Marc, 16, Boulevard Jean-Jaurés, Boulogne-Sur-Seine. Machine a Coudre
Stanley Weston, 110, Burnley Road, Briercliffe. Testing Machine .. .. }

Additional Prizes of Meccano Outfits and Train Sets.

L. H. Woodworth, Box 385, Arcola, Illinois. T Head Crane.
A. E. Roberts, Henry Street, Ruabon. Traction Engine.
E. Simpson, 14, Mersey View, Blundellsands. Silk Twisting Machine.
J. de Flamesuil, Rue St. Pierre, Yvetot. Presse rotative à impremeur.
G. Marmonier, 149, Avenue de Saxe, Lyon. Marteau pilon.
H. G. Lee, 48, Cleveland's Road, Burnley. Twin Elliptic Harmonograph.
W. Tung, Nord 47, La Chaux de Fonds. Machine à Isoler.
A. Jullien, 65, Avenue Léon Bollee, La Mans. Indicateur de Watt.
E. Young, 42, Wellesley Road, Colchester. Lathe.
P. Burcher, 4, Rue Deloye, Nice. Horloge electrique.
G. Valeriani, Baxiano (prov. Teramo), Italia. Mecchina per rivestive fili elettrici.
H. M. Hayes, Brean House, West Street, Axbridge, Som. Testing Machine.
A. Bourdet, 69, Avenue du Chemin de fer, Machine à faire du retord.
G. Chifflot, 90, Boulevard Raspail, Paris. Motrice Electrique.
W. J. Burge, 30, St. Margaret's Road, Manor Park, London, E.12. Lighthouse and Signal Station.
N. Raymond, 66, Rue de la Charite, Lyon. Funiculaire.
A. N. Carr, 12, Hardwick Street, South Shields. Colliery.
N. K. Axtell, 18, Hamilton Terrace, New York. Oscillating Electric Fan.
A. E. Hill, 79, Dixon Street, Liverpool Road, Irlam. Stripper Crane.
H. Marie, 57, Rue de Belleville, 19ea, Paris. Montagne Russe.
A. L. Troup, 31, Kimbolton Avenue, Linton Sands, Notts. Coin Control for Electric Motor.
E. L. Thompson, "Inglewood," Russell Avenue, Lindfield, N.S.W. Alarm Clock.
E. W. Morris, 429, East 51 Street, New York. Gear Box.
T. A. G. Rappis, B.A., Via G. B. Lanata, N.1, Genoa, Italy. Military Motor Car.
D. Adamson, "Ivanhoff," 118, Liscard Road, Wallasey. Dockyard Shear Legs.
R. Maglia, Esmeralda 274, Buenos Aires. Looping the Loop.
D. E. Fleming, 37, St. Peter's Road, Croydon, Surrey. Swivelling Cantilever Crane.
R. Voillaume, 1, Avenue de Paris, Versailles. Excavateur.
G. Marmonier, 149, Avenue de Saxe, Lyon. Elevateur à godets combine avec un transporteur à palettes.
V. M. Spence, 19, Williams Avenue, Dulwich, S., Australia. Power Press.
Henri Tenard, Sies (Orne), France. Planimetre.
Ada Bentley, 26, Morris Road, Crownfield Road, Leytonstone. Umbrella.
E. Forshaw, Albion House, Albion Road, New Mills, Stockport. Galloping Donkey.
E. S. Twist, Leicester Road, Blaby, Leicester. Free Wheel.
J. E. Gask, 86, Farm Lane, London, S.W.6. Band Knife Cutting Machine and Table.
J. M. Smith, Cheyne Cottage, Gordon Avenue, Stanmore. Electric Motor.
G. W. Adams, 8, Nelson Terrace, Westward Ho. Hand Drill Attachment for Bench.
J. Van Koecke, 10, rue de l'Orge, Ixelies, Brussels. Propulseur à bras.
W. H. Lowe, 28, Henley Gardens, Consett. Vertical Drilling Machine.
J. B. Craven, 5, Brook Street, Selby. Electric Overhead Mono-rail Travelling Crane.
J. B. Roberts, 64, Mansell Street, Port Talbot. Hydraulic Elevator.
F. C. Osgood, Cambus-by-Stirling. Automatic Ore Unloader.
Helge Rafn, Blytsvej, 8, Copenhagen, F. Meccano Automaton.
Percy Playfoot, 31a, Portswood Road, Southampton. Weight Motor for Meccano Models.
E. Holt, Ashleigh, Swansfield Road, Alnwick. Grandfather Clock.
M. E. Galliers, "Ponsford," Escombe, Natal, S.A. Tram Car.
A. Upson, 102, Churchill Road, Willesden Green. Foster's Latest Showman's Engine.
H. E. V. Summers, "St. Omer," Clinton Avenue, St. Peter's, S. Australia. Adelaide Combination Electric Car.
D. Firestone, 811, R. Road Avenue, Hancock, Mich. Carpet and Rug Cleaner.
W. Higley, 634, Campbell Avenue, Long Branch, N.J. Navy Yard Crane.
E. Thomas, 734, Arcadia Street, Victoria, Transvaal, S. Africa. Dock Crane.
F. Henderson, 66, St. George's Road, Bellevue, Johannesburg. Inclined Plane and Skip for Waste Rock Pump.
B. D. Virmani, c/o Mr. K. C. Virmani, General Merchant, Dera Ismail Khan, India. Spinning Wheel.
J. Boursier, 28, Rue de Lyon, Paris, XIIe. Drageur.
Rene Parel, Rue A. M. Piaget, 81, La Chaux de Fonds. Jeu d'echecs Meccano.
C. E. Box, "Lyndhurst," Moor Lane, Great Crosby. Boiler Trolley.
Robert Smith, The Hostel, Wyton, Hunts. Pit Head Gear.
C. Boocock, 64, Glen Street, Colne, Lancs. Roundabout.
A. Maisonneuve, Librairie, Olliergues, Puy de Dome, France. Pylone Eolien.
J. Morris, Royal Albert Institution, Lancaster. Roundabout.
C. Griffiths, 18, Fortune Green Road, W. Hampstead, N.W.6. Adding Machine.
E. Borgeaud, Moreno 1342, Dpto. 26, Buenos Aires. Planimetre.
Emile Martin Fils, 44, Cours St. Andre, Grenoble. Roue-poulie.
R. M. Anderson, Tiakitahuna, Palmerston, N., N.Z. N.Z. Traction Engine.

Section "B" (For Competitors between 10 and 14 years of age)

J. Fox Mortimer, Jr., 150, West 86th Street, New York. Hook and Ladder Fire Truck ..
S. B. Evans, 22, Howard Road, New Malden. Quayside Warehouse .. } **First Prize (Divided) - - £15**

R. Shillito, 34, Main Street, Wombwell, Yorks. Miniature Colliery ..
W. K. Bhaisa, 141, Dadar Road, Dadar, India. Indian Giant Wheel ..
J. E. Field, 58, Derwent Road, Palmers Green, London, N.13. Swivelling Gantry .. } **Second and Third Prizes (Divided) £16**

Additional Prizes of Meccano Outfits and Train Sets.

F. Godfrey, 3, Russell Place, Norfolk Street, Hull. Conveyor.
H. Walmsley, 57, Brownlow Road, Horwich. Goods Loco.
Perino Emile, 1, Rue Lamartine, Nice. Velocimane.
H. McWilliam, 263, Main Street, Bridgeton, Glasgow. Seaplane.
G. S. Barrass, 7, Chapel Row, New Lambton, Fence Houses, Durham. Electric Coal Conveyor.
M. Brenot, 85, Boulevard de Charonne, Paris XIe. Funiculaire.
C. P. Sharman, 17, Northumberland Road, Broomhill, Sheffield. Distance Meter.
D. J. Wakely, The Grange, Church Norton, Near Chichester. Steam Lorry.
L. Boige, Les Guillemottes, Vienne (Isere). Orchestra Meccano.
R. T. Gurnett, 46, High Street, Grays, Essex. Meccano Clock.
G. Cheetham, 156, Horton Grange Road, Bradford, Yorks. Skittle Alley.
D. W. O. Dwyer, 8, St. Alban's Road, Woodford Green, Essex. A Crocodile Wagon.
G. Nordahl-Pedersen, Dovregaten 1, Kristiania, Norway. Kicking Sleigh.
C. H. Rudd, 51, Richmond Street, Barnstaple. Metal Cutting Jig Saw.
J. W. Dring, 18, Coupland Terrace, Beeston Hill, Leeds. Bogie Wagon.
T. Carnana, 28, Str. Fra. Diego Hamrun, Malta. Sewing Machine.
C. A. Mason, 23, Glasgow Street, St. James', Northampton. Combined Morticing and Boring Machine.
K. Harbridge, 16, Feckenham Road, Redditch. Drop Hammer.
A. W. Coupe, 9, Delhi Road, Bury Street, Edmonton, N.9. Multiple Spindle Drill.
C. G. and R. L. Trapnell, Essendene, Clifton, Bristol. St. George and the Dragon.
D. R. Stewart, Trenchfield, King's Ave., Prestatyn. Clockwork Fan.
G. Bentley, 26, Morris Road, Crownfield Road, Leytonstone. Try-your-Strength Machine.
Pierre Lehmann, route Nationale a Dieulouar, Meurthe-et-Moselle. Martinet Laminoir.
Mosca Maurizio, Via Cavalletto No. 1, int. 7, Genova (Italia). Dipanatrice.
Renauld Scarcericau, 9, rue de Frignicourt, Vitry-le-Francois, Marne, P. Promenade en barque.
Jacques Hersleven, 342, Chausfee de Waterloo, Brussels. Porte Congie.
W. Knoll, Kinderheinr, Samaden, Schweig. Forderriernen.
Orrin, R. Fackler, Aitkin, Minn, U.S.A. Meccanograph.
E. R. Sinclair Watkin, 146, Gerningham Road, New Cross, London, S.E.14. Motor Lorry.
Norman Hoyle, "Elmfield," Higher Lane, Lymm, near Warrington. Mono-rail Luggage Transporter.
J. A. Rance, 35, Peel Road, Wealdstone, Middlesex. Horse and Tip Cart.
T. Tostrup, Incognito Terrace 3, Kristiania, Norway. Balance.
P. Jacot, 26, Rue des Victoires, Paris. Ascenseur.
G. R. Bent, 18, Reddish Vale, Reddish, near Stockport. Motor Stone Lurry.
L. Radclyffe, "Derwent," Laburnum Street, Blackburn, Victoria, Australia. A Meccano Mangle.
Eliseo F. Colombo, Domicilio Eucuman 3054 D. to 12, Buenos Aires. Crane.
Eduardo Puceiro, Lavalle 801, Buenos Aires, Windmill.
Nicolas Guisepponi, Don Cristobal 1286, Buenos Aires. Trolley Car.
Yvonne Liot, 4 Quai Brixeux 4, Quimperle. Parapluie sans Couverture.
R. A. Ivers, Marikuppam, Kolar Gold Fields, S. India. Boy Scouts' Semaphore Tutor.
H. Webster, 185, John Street, London, Ontario, Canada. Cylinder Press.
F. J. Hunter, 178, North View Road, Hornsey, N.8. Steam Wagon.
A. Tulpius, 49, Avenue Wendt, Geneve (Suisse). Grand Huit.
Gosta Grahn, Teatergaten 23, Goteborg, Sweden. Dredging Machine.
Theodore Rietzel, 4, George Street West, Roxbury, Mass. Portable Drill. b
Armand Tocabens, 24, Bd. Gambetta Alger, Algerie. Tramway electrique.
P. Richard, Clinique du Docteur le France, Roscoff, Finistere. Usine d'avions a Moteur.
Beatrice Shilling, 65a, South Street, Dorking, Surrey. Spinning Wheel.
V. K. Rangappa, c/o the Trustee, Vizianagram, India. Water-lift "Persian Wheel."
Joseph de'Conti Manduca, "Eltham House," 57 Sda. Ridolfo, Sliema, Malta. Upper Barraca Lift.
D. E. Elkis, 6, Peak Road, Hong Kong, China. Mystery Tower in Action.
L. P. Trotter, Hillgrove, Otago, New Zealand. Modern Windmill.
G. Ugo, Via Assarotti 10/3, Genoa, Italy. Machine a' Carder la Laine.
Luis Vazquez de Parga, Calle de Monte Esquinza, No. 11, Madrid. Windmill.
W. Salter, The Vineries, Mill Hill, London, N.W.7. Clocked work by weight.
T. A. Gatley, 504, Liverpool Road, Peel Green, Manchester. Crane Gear Box.
Eric Desbruslais, The Mall, Amritsar, Punjab, India. Blondin Cable Way.
W. Muckle, 89, George Street, Willington Quay-on-Tyne. Double Action Steam Pumps.
Matthew Onderdonk, East Greenbush, Box 29, New York State. Electric Washer and Wringer.
W. S. Hencke, Stop 147, Shore Line, Willoughby, Ohio. Roller Coaster.
James Hertig, Rue Midole 12, Besangon, Doubs. Un Phare.
Charles Rochette, Rambervillers, rue Clemenceau, Vosges. Machine à'onduler le papier.
J. Hingant, 63, Rue S. Quentin, Havre. Ferry Boat de rivière.
Franco Palmizi, Via Mentana 9, Bologna, Italy. Macchina da cucire a bobina centrale.

Section "A" (For Competitors under 10 years of age.)

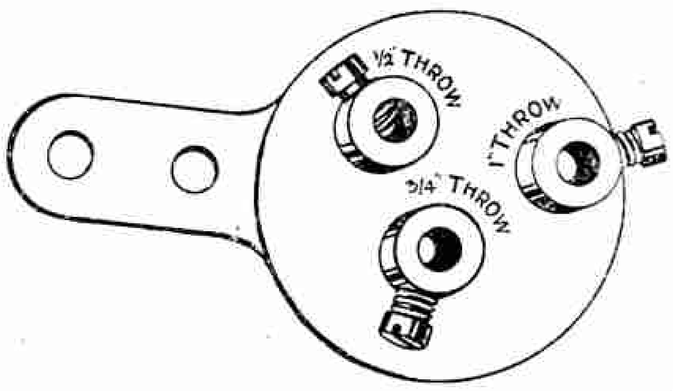
Fred Dighton, 147, Florence Road, Wimbledon, S.W.19. Mechanical Digger ..
N. J. Pollet, 41, Boulevard Pater, Valenciennes, Nord. Transbordeur Mecanique
John P. Turner, Jr., 520, West 122 Street, New York. Workshop .. } **First and Second Prizes (Divided) £20**

S. Delorme, Rue Bahpt, St. Julien, Mezieres, Ardennes. Cuisine Roulante. .. **Third Prize - - - - £4**

Additional Prizes of Meccano Outfits and Train Sets.

L. M. Gibson, 31, Leytonstone Road, Stratford, E.15. Royal State Coach.
R. J. Hajik, 140, Beach, 127 Street, Belle Harbor, L.I. Motor Plough.
E. Alberani, Via Barberia, 11, Bologna. Aerial Swing.
J. Dorling, Delamere Street, Boniface Cliff, Shanklin. Lighthouse.
P. R. Charles, 2, Brook Mount, Llangollen, Acrefair, near Ruabon. Battle Cruiser.
R. Colombe, 202, Rue Croix Nivert, Paris 15e A. Loterie Foraine.
W. Blacker, 4, East Park Grove, East Park Road, Leeds. Football Game.
R. Dupuy, 57, rue de Barbezieux, Cognac, France. Rouet a'Filer la Laine.
K. Kenney, 77, Parliament Hill, London, N.W.3. Chassis.
S. Sabbatini, via Simonetti No. 2, Ancona, Italy. Novo di Pasqua.
R. Hind, Queens Street, Chatham, Ontario, Canada. London Bus.
J. N. Pullen, 8, Queens Street, Broadwater, Worthing. Motor Life Boat.
P. M. Waszink, Delft N., Einde 9, Holland. Tower.
W. Melville, 44, Woodville Gardens, Langside, Glasgow. Mill Engine.
M. Solinot, 9, Rue Emilio, Castelar 120, Paris. Escalier Elevateur.
E. Jeltes, Nieuwe Gracht 49, Haarlem, Holland. Dutch Drawbridge.
A. Ladeville, 83, Bd. Sebastopol, Paris. Grue Electrique.
H. Gordon Hill, Suite 50, Wellsboro' Apts, Toronto. Ship.
M. O. Decugis, 20, Quai du Louvre, Paris 1e. Balancoine.
Earl Nicholson, Newberry, Mich., U.S.A. Buzz Saw.
J. Anthony, 10, Stanmore Road, Stevenage. Marble Chute.
G. Wharton, Ringstead, Kings Lynn. "Overtime" Farm Tractor.
A. Holmes, 40, Bellevue Street, West Gorton, Manchester. Lift for Toy Soldiers.
W. Saville, 1, Delamere Avenue, Stretford, near Manchester. Draw Bench.
J. Murphy, 6, North Mall, Cork. Horse Mowing Machine.
W. T. F. Castle, St. James' Rectory, Clitheroe, Lancs. Turnip Chopper.
H. Bryan Hillcoat, Portland Hotel, Buxton. Winch.
C. J. Morley, The Vicarage, Southwingfield, Alfreton. Crane Truck.
G. Horton, 183, Hodges Street, Wigan. Bacon Slicer.

Three New Meccano Parts.

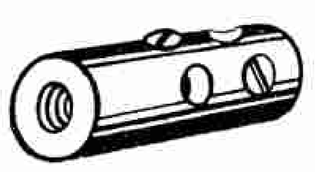


Triple Throw Eccentric, No. 130.

An eccentric is generally used to convert a rotary motion into a to-and-fro motion, and the Meccano eccentric is so designed as to give three different throws. The Throw of an eccentric is the amount of the to-and-fro motion which it can impart.

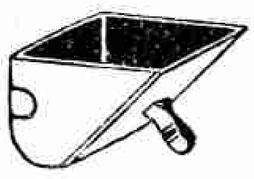
The three bosses on the eccentric are arranged at different distances from the centre of the eccentric and consequently if the eccentric is secured on the shafting by that boss which is nearest the centre of the eccentric, a less amount of to-and-fro movement will be obtained, namely, ½ in.; if the eccentric be secured by the boss which is next furthest from the centre, a greater to-and-fro movement, namely, ¾ in., will be obtained, whilst if it is connected by the boss farthest from the centre, the greatest movement of 1 in. is obtained.

The arm is perforated to enable the eccentric to be connected to any length of strip, as desired. Price 1/3 each.



Threaded Coupling, No. 63c.

A new coupling designed to hold a threaded rod at one end and a plain rod at the other. Price 9d. each.



Dredger Bucket, No. 131.

For attaching to Meccano sprocket chain by means of clips. Price 2d. each.

Our Mail Bag.

The Editor has a little talk in this column with his Meccano boys. Whether or not he has space to reply to them all here, he is always glad to hear from them. He receives hundreds of letters each day, but only those which deal with matters which are likely to interest other Meccano boys can be dealt with here.

Correspondents will help the Editor if they will write on one side of the paper only.

E. Winterbottom, Shaw.—Many thanks for your sketch. It is nicely drawn, and the idea in the main is quite good. It is, however, on too large a scale to be reproduced in the *M.M.*

A. B. Grosvenor, Norwich.—The Guild Secretary has handed your story on to us, and we hope to be able to use it in a later number. We have followed your work both at Brightlingsea and Norwich with interest and pleasure.

C. Beasley, Exeter.—The Hornby Train is certainly a flyer, and we are not surprised to hear that your's won the race. The No. 2 Hornby Train will be ready soon, with a bigger and even more powerful engine.

C. Carter, Horsham.—Letters like the one you have sent us give us much pleasure. Your name has been added to the long list of Mr. Hornby's friends.

G. Kerley, Fulham.—"I believe the Guild badge has a charm in it. I believe the Meccano Magician has charmed it. It is better than medicine and a hundred times nicer." Many boys have written to us to tell us of the good things which have happened to them since they wore the Meccano badge. Our explanation of this is that Meccano boys are happy, and they look happy, and all the world loves to shower good things on happy boys.

B. G. Kingston, Guildford.—Thanks for your interesting account of how you made a frame for your Guild Certificate. Let us hear more about your Meccanoland Railway.

Jack French, Wilmington.—You quite justify your claim to be called "The Meccano King" by your School friends. You are acquiring much excellent engineering knowledge which you will find useful later. We will consider your suggestion for a new Competition.

L. Jonsson, Natal.—We were pleased to see the photo of the excavating work being done on your father's farm in connection with the new railway. It appears to be a big engineering feat. We should like to see a photo of the completed cutting sometime.

A. Vine, Bournemouth.—Now that you have at last secured your badge, we shall expect you to take a keen interest in all the doings of the Guild. We note that your father agrees with you about Meccano.

W. F. Butterworth, Disley.—"The carbon rods used in the experimental arc-lights described in Nos. 17 and 18 of the *M.M.* are the same as the carbons from the old cells of a pocket lamp battery." This may prove a useful tip for other Meccano boys who wish to make these models.

J. Gray, Glasgow.—"I have two cash boxes and I call one of them "Savings for Meccano Parts." Half of any money I get goes into it. It soon mounts up and you never miss the odd pennies and halfpennies." It gave us pleasure to read your enthusiastic letter James. You will find the results of the big Competition in another part of this issue.

H. Grierson, Christchurch, N.Z.—Your suggestion that the Meccano Guild adopt the Maori words *Kia Ora* meaning "Good Luck" as their motto is an interesting one, but we think that most of the members would prefer a motto in English. We were glad to hear from your father. Your Hornby Train will run better than ever as you use it more. Thanks for your suggestion that we arrange engineering contests and confer degrees on clever Meccano boys, which we will consider.

A. Clements, Birmingham.—Your clever Magazine "Nuts and Bolts" grows more interesting each issue, and we are pleased to hear that the circulation is increasing. You have our very best wishes.

G. Allen, Bedford.—In these days no one looks down on a boy or a man who works for his living. The only question asked is "Are you a *good* workman?" If you can give a satisfactory answer to that question, you can hold up your head anywhere.

A. W. James, Patagonia.—Many thanks for your very interesting photos which we may be able to use in a future issue. We are gratified to know that yourself and your wife bless Meccano for the amusement and instruction it has provided for your boy. It is hard luck that he should only have an opportunity of coming in contact with other children once a year.

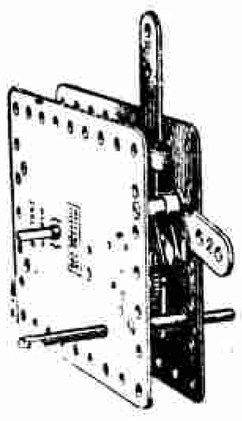
Grace A. Holmes, Bournemouth.—We are always glad to hear from Meccano girls. Your poetry is good but rather too long for use in this column. There is no reason why you should not enter any of the Meccano competitions, and nothing would please us better than to see your name amongst the winners.

Graham Penfold, Woodbridge.—

"All the boys like Meccano you know,
Because they can make things that go.
One day a searchlight, the next one a tank,
For all these fine things Mr. Hornby we thank.
We make heaps of toys, never twice the same one,
So why don't *you* join us in this ripping fun?"

We like both your poetry and your letter Graham. We are sorry we cannot let you have all the back numbers of the *M.M.* which you need to complete your series. Many of them are out of print.

The Meccano Motors.

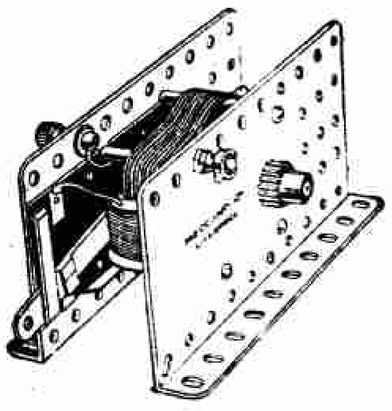


The Clockwork Motor.

This is a splendid piece of mechanism, simple, powerful and reliable, and fitted with starting, stopping, and reversing levers. By the use of extra gearing made from Meccano parts, a greater lifting power is obtained.

Price 12/6

The Electric Motor.



This motor is well designed, simple, strong, and free from danger. Suitably geared it has a lifting power of over 30 lbs. It may be run by a 4-volt accumulator, or direct from the main if a satisfactory transformer is used. Fitted with reversing lever, starting and stopping mechanism, it is the most powerful and satisfactory toy Electric Motor yet designed.

Price 17/6

Meccano Manuals of Instructions.

There are two Meccano Manuals of Instructions, and no Meccano boy is properly equipped unless he has them both. Book No. 1 is the regular Manual which goes with the main Meccano outfits. It contains illustrations and full instructions for making 323 fine models; some of the models have been designed by our own staff of experts, and others are prize-winning models contributed by Meccano boys, from every country in the world. Price 2s. 6d. (postage 3d. extra).

Meccano Manual, Book No. 2, has only recently been published, and it contains illustrations and instructions for building 100 entirely new models, very many of them prize winners. It contains Tanks, Guns, Submarines, Searchlights, and other warlike models; also a new series of simple and intensely-interesting scientific experiments which any boy can make and which impart a lot of useful knowledge. Price 1s. 3d. (postage 2½d. extra).

Prices of Meccano.

No.			
0	Outfit with full instructions for building		6/-
1	do.	do.	10/-
2	do.	do.	20/-
3	do	do.	30/-
4	do.	do.	50/-
5	do.	do. (Carton)	70/-
*5	do.	do. (Wood)	100/-
*6	do.	do. (,,)	180/-

*In well-finished cabinet with lock and key

Accessory Outfits.

No.						
0a	Converting a	No. 0	into a	No	1 ..	5/-
1a	do.	do.	1	do.	2 ..	11/-
2a	do.	do.	2	do.	3 ..	12/-
3a	do.	do.	3	do.	4 ..	22/-
4a	do.	do.	4	do.	5 ..	17/6
5a	do.	do.	5	do.	6 Car.	65/-
5a	do.	do.	5	do.	6 Wood	95/-
Inventor's Outfit "A"				..	..	10/-
Inventor's Outfit "B"				..	..	25/-
Meccano Clockwork Motor				..	..	12/6

Change of Address.

Subscribers should immediately notify the Editor of any change of address. Send a postcard *giving the old and new address*, so that records may be kept up to date.

(*Continued from page 2.*)

were within 25,000,000 miles from Mars. At this point the pilot pulled a lever, which, by means of electrical influence, cut off the attraction of Earth, and the gravitation of Mars commenced to draw "The Spanner" to her, considerably increasing the speed.

In three weeks time, they landed on Mars, and directly the door was opened they were besieged by a crowd of Martians, each wearing a triangular badge, enamelled in blue and white, with the words "The Meccano Guild" engraved on it, in the Martian language. The Martians clamoured for the goods they had ordered, when "The Spanner" had last called, particularly for the latest *Meccano Magazine*, and the Meccano Manual 1579. The pilot watched the Martians being served with their goods, then turned to a passenger, and remarked:

"There's a big rush for Meccano things, is there not?"

"You are right," was the reply. "But they will obtain their parts sooner, when Mr. Hornby finishes the factory he is building here."

"It must be nearly finished," rejoined the pilot. "Mr. Hornby is due to return to England this next trip and he seldom leaves anything unfinished."

"The Spanner" remained for two days on Mars, to take in a fresh supply of radium—for Mars possesses countless tons of this valuable element—before making the return journey to England, carrying with her Mr. Hornby.

The next time "The Spanner" flew to Mars, she did not carry Meccano goods, for the factory was at work manufacturing Meccano parts for the Martians, which saved the trouble incurred in taking them to the planet.

PUBLISHED BY MECCANO LTD., BINNS ROAD, LIVERPOOL. *Printed by Taylor, Garnett, Evans & Co., Liverpool, Manchester and London.*